

Title (en)  
NOVEL PHOTOCATALYST AND METHOD FOR PRODUCING SAME

Title (de)  
NEUER PHOTOKATALYSATOR UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
NOUVEAUTE DE PHOTOCATALYSEUR ET METHODE DE FABRICATION DE SEMBLABLE

Publication  
**EP 1738827 A1 20070103 (EN)**

Application  
**EP 05720640 A 20050311**

Priority

- JP 2005004369 W 20050311
- JP 2004079120 A 20040318

Abstract (en)  
A photocatalyst produced from an easily available, relatively low-cost silicon oxide material is disclosed which is capable of decomposing environmental pollutants with improved efficiency. The photocatalyst is produced by pulverizing an artificial crystal, specifically machining waste thereof, into powder particles having a particle diameter of not more than 3.0 mm and then immersing the particles into a solution containing a hydrogen fluoride for activation. Environmental pollutants such as nitrogen oxides (NOx) and harmful organic compounds can be efficiently decomposed by coming into contact with this photocatalyst while being irradiated with activation light under oxidizing conditions.

IPC 8 full level  
**B01J 35/02** (2006.01); **A61L 9/00** (2006.01); **A61L 9/01** (2006.01); **A61L 9/18** (2006.01); **B01D 53/86** (2006.01); **B01J 21/08** (2006.01); **B01J 27/12** (2006.01); **B01J 35/00** (2006.01)

CPC (source: EP US)  
**B01D 53/8628** (2013.01 - EP US); **B01D 53/8668** (2013.01 - EP US); **B01J 21/08** (2013.01 - EP US); **B01J 35/39** (2024.01 - EP US); **B01D 2255/30** (2013.01 - EP US); **B01D 2255/802** (2013.01 - EP US); **Y02W 10/37** (2015.05 - EP US)

Designated contracting state (EPC)  
CH DE FR GB LI

DOCDB simple family (publication)  
**EP 1738827 A1 20070103**; **EP 1738827 A4 20101006**; JP 2007307430 A 20071129; JP 4505688 B2 20100721; JP WO2005089941 A1 20080131; US 2007042902 A1 20070222; US 8404616 B2 20130326; WO 2005089941 A1 20050929

DOCDB simple family (application)  
**EP 05720640 A 20050311**; JP 2004079120 A 20040318; JP 2005004369 W 20050311; JP 2006511175 A 20050311; US 59324905 A 20050311